

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

CASE 9920, CASE 9921

EXAMINER HEARING

IN THE MATTER OF:

Application of Sirgo Operating, Inc., for an  
Unorthodox Oil Well Location, Lea County, New  
Mexico; Application of Sirgo Operating, Inc., for  
Two Unorthodox Oil Well Locations, Lea County, New  
Mexico

TRANSCRIPT OF PROCEEDINGS

BEFORE: MICHAEL E. STOGNER, EXAMINER

STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO

April 18, 1990

A P P E A R A N C E S

FOR THE APPLICANT:

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\* \* \*

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1 WHEREUPON, the following proceedings were had  
2 at 2:42 p.m.:

3 EXAMINER STOGNER: I'll now call Case Number  
4 9920, which is the Application of Sirgo Operating,  
5 Incorporated, for an unorthodox oil well location, Lea  
6 County, New Mexico.

7 I'll call for appearances.

8 MR. CARR: May it please the Examiner, my  
9 name is William F. Carr with the law firm Campbell and  
10 Black, P.A., Santa Fe. We represent Sirgo Operating,  
11 Inc., and I have one witness.

12 At this time I would request that this case  
13 be consolidated for purposes of hearing with Case 9921,  
14 which is also an Application of Sirgo for two  
15 unorthodox well locations in the same general area.

16 EXAMINER STOGNER: If there are no  
17 objections, I'll call Case Number 9921, which is the  
18 Application of Sirgo Operating, Incorporated, for two  
19 unorthodox oil well locations, Lea County, New Mexico.

20 Are there any other additional appearances  
21 besides Mr. Carr for the Applicant in either of these  
22 matters?

23 Okay, Mr. Carr?

24 MR. CARR: May it please the Examiner, before  
25 we begin, in Case 9920 we have requested and the

1 Division has advertised an unorthodox location for the  
2 East Pearl Queen Unit Well Number 84. The ad provides  
3 that it will be 165 feet from the south line.

4 We have encountered a problem with the land  
5 owner who has a stock pen at that point and has  
6 requested that we move that well location. We have  
7 agreed to move it 100 feet to a point 265 feet from the  
8 south line. That moves it toward a standard location  
9 from the location that was advertised.

10 With your permission, we would request that  
11 we be permitted to amend the Application to move back  
12 to a standard location, thereby accommodating this land  
13 owner.

14 EXAMINER STOGNER: Okay, which well? I'm  
15 sorry.

16 MR. CARR: It is the well in Case 9920, and  
17 it is the East Pearl Queen Unit Well Number 84. It was  
18 advertised 165 feet from the south line. We would like  
19 to move that to 265 feet from the south line, and  
20 that's toward a standard location.

21 EXAMINER STOGNER: And that would still be  
22 ten feet from the west line?

23 MR. CARR: Yes, sir.

24 EXAMINER STOGNER: Are there any other  
25 amendments to either of the other two wells?

1 MR. CARR: No, sir. We have an error in one  
2 exhibit, but we are asking exactly, other than that  
3 change, for what has been advertised, and we'll call  
4 that out when we get to it.

5 EXAMINER STOGNER: Okay, this amendment will  
6 not lead -- or require a need for a readvertisement,  
7 since it is moving to a less unorthodox location.

8 However, Mr. Carr --

9 MR. CARR: Yes, sir.

10 EXAMINER STOGNER: -- this has happened a  
11 couple of times in administrative orders. I am going  
12 to request that Sirgo make sure that the locations that  
13 they ask for either administratively or at a hearing be  
14 drillable locations.

15 MR. CARR: Okay.

16 EXAMINER STOGNER: Okay, Mr. Carr?

17 MR. CARR: At this time we would call Mr.  
18 Frick.

19 EXAMINER STOGNER: Let's see, I guess we need  
20 to swear the witnesses in. How many witnesses have you  
21 got?

22 MR. CARR: I have one witness.

23 EXAMINER STOGNER: Okay, will the witness  
24 please stand to be sworn?

25 (Thereupon, the witness was sworn.)

1 EXAMINER STOGNER: Thank you, you may be  
2 seated.

3 Mr. Carr?

4 JAMES WALSH FRICK,

5 the witness herein, after having been first duly sworn,  
6 upon his oath, was examined and testified as follows:

7 EXAMINATION

8 BY MR. CARR:

9 Q. Would you state your full name for the  
10 record, please?

11 A. James Walsh Frick.

12 Q. Mr. Frick, where do you reside?

13 A. In Houston, Texas.

14 Q. How are you employed, and in what capacity?

15 A. I'm a consultant, and I'm employed as a  
16 consultant for Pyramid Energy, Incorporated.

17 Q. What is the relationship of Pyramid Energy to  
18 the Applicant, Sirgo Operating, Inc.?

19 A. Pyramid Energy recently acquired properties  
20 from Sirgo Operating Company, and I represent Pyramid  
21 Energy, and Sirgo Operating Company is now the operator  
22 of these properties.

23 Q. Are they a contract operated for Pyramid?

24 A. That's correct.

25 Q. Have you previously testified before the New

1 Mexico Oil Conservation Division?

2 A. No.

3 Q. Would you briefly review for Mr. Stogner your  
4 educational background and then summarize your work  
5 experience?

6 A. I'm a graduate petroleum engineer. I  
7 graduated from the University of Tulsa in 1947.

8 I started working for Texaco in 1941 as an  
9 engineering clerk. I worked for them through the years  
10 as a -- about six years as a field engineer and some 28  
11 years as a reservoir evaluation engineer, of which the  
12 last ten years with them was in a research lab. I was  
13 their reservoir engineer in reviewing enhanced oil  
14 recovery projects.

15 Since leaving Texaco or retiring in 1979,  
16 I've worked for Core Laboratories, Incorporated, one  
17 year as a consultant, evaluating properties for them.

18 Texaco hired me back as a consultant for a  
19 few years, and I went to various places, mainly Nigeria  
20 and Angola. And then in 1984 I worked for Damson Oil  
21 Corporation as an acquisition manager. Then I went  
22 back on my own as a consultant, and I've worked as an  
23 evaluation consultant since that time.

24 Q. As a consulting engineer, do you have any  
25 particular area of specialization?

1           A.   Possibly that would fall into waterflooding,  
2 my main specialty.

3           Q.   And have you been involved with waterflooding  
4 in your employment with Texaco and as a consultant?

5           A.   Yes, I have. I've been doing waterflooding.  
6 In fact, it goes back so far it's almost an  
7 embarrassment. I was a member of the Oklahoma-Kansas  
8 Waterflood Association in 1946, and I wrote Texaco's  
9 first computer program in waterflooding from styles  
10 operations to 1957.

11                   I have been -- helped get the Salem Unit  
12 flooded in 1952, and many other waterflooding units in  
13 Oklahoma started in the early Fifties.

14           Q.   Have you been called upon to teach courses on  
15 waterflooding?

16           A.   Yes, I have. I've written a manual for  
17 Texaco in the practical engineering aspects of  
18 waterflooding.

19           Q.   Are you a member of any professional  
20 associations?

21           A.   Yes, I am. I'm a member of the Society of  
22 Petroleum Engineers, I'm a member also of the Society  
23 of Petroleum Evaluation Engineers. I'm also a  
24 registered professional engineer in the State of Texas.

25           Q.   Are you familiar with the Applications filed



1 for Sirgo Operating, Inc., in each of the cases that  
2 have now been called for hearing?

3 A. Yes.

4 Q. And are you familiar and have you made a  
5 study of the general area in which the wells involved  
6 in these Applications are located?

7 A. Yes, I have. I, in fact -- Sirgo had its --  
8 the East and West Pearl Queen Units evaluated. I  
9 reviewed their evaluation for Pyramid Energy, and I  
10 think it was on the basis of my review that Pyramid  
11 purchased these units from Sirgo. I have looked at  
12 most every electric log in the field, I've looked at  
13 core analysis on some 30 wells, analyzed them very  
14 carefully, and I feel very familiar with the fields.

15 Q. Are you prepared to make -- present exhibits  
16 and make recommends to the Division?

17 A. Yes, I am.

18 MR. CARR: We tender Mr. Frick as an expert  
19 in petroleum engineering.

20 EXAMINER STOGNER: Mr. Frick is so qualified.

21 Q. (By Mr. Carr) Now, Mr. Frick, would you  
22 briefly state what Sirgo seeks with this Application?

23 A. Yes. Sirgo, in these Applications, we are  
24 planning, Sirgo, through Pyramid Energy, as seeking to  
25 drill five or possibly six wells in order to upgrade

1 our evaluation of this area, in order to become more  
2 definitive of the reserves and the economics of  
3 redeveloping these two waterflood -- previous  
4 waterflood units.

5 Q. And today you're seeking approval for three  
6 unorthodox locations for three of those wells?

7 A. Yes, we are.

8 Q. I think it would be helpful, Mr. Frick, if we  
9 could start with some general background information  
10 and if you could review generally the background of  
11 these two units for Mr. Stogner, and in so doing if you  
12 would refer to what has been marked as Sirgo Exhibit  
13 Number 1. If you would identify that and then review  
14 the information on that exhibit.

15 A. Okay. Exhibit Number 1 is a map of the East  
16 and West Pearl Queen Units that -- showing a boundary  
17 line between the two units, and it also shows in black,  
18 it shows the previously drilled wells. And in red it  
19 shows those planned development locations that may be  
20 drilled as a result of our evaluation.

21 It's a general intent of redeveloping these  
22 fields to go in and take this previously developed  
23 area, that was developed on 40-acre spacing, and  
24 redevelop it on 20-acre spacing, with each new red well  
25 being a producing well, and the black wells, when

1 they're on standard location, make them injection  
2 wells.

3 Q. Mr. Frick, what percent of the working-  
4 interest ownership in each of the existing units is  
5 owned now by Pyramid and operated by Sirgo?

6 A. It's -- To the best of my knowledge, what  
7 they've told me is that they own approximately 95  
8 percent of the East Pearl Queen Unit and approximately  
9 92 percent of the West Pearl Queen Unit.

10 Q. And are they the operator of both of those  
11 units?

12 A. That's correct.

13 Q. Let's review briefly the production history  
14 from the unit, both what has been obtained through  
15 primary production and through initial secondary.

16 A. All right. In the East Pearl Queen Unit, it  
17 was originally discovered in 1956, and went through a  
18 primary stage of development in which approximately 52  
19 wells were drilled, and the peak production at that  
20 period was in 1961.

21 It started declining in production, and then  
22 in 1964, Shell Oil Company formed the East Pearl Queen  
23 Unit for the purpose of waterflooding. And they sold  
24 this unit to Petrus on July the 1st of 1986, and Petrus  
25 sold it to Sirgo on November the 1st, effectively

1 November the 1st, 1989.

2 During the primary phase, from 1961 through  
3 1964, the trend showed that there is a primary  
4 production of about 2,022,000 barrels of oil recovered.  
5 The first secondary waterflood recovered an estimated  
6 3,748,000 barrels of oil while they had it in  
7 operation, and subsequent production records up until  
8 this time.

9 The West Pearl Queen Unit was discovered in  
10 1958, and it went through a primary development stage  
11 and was unitized for waterflooding in 1964 by Gulf,  
12 which was later Chevron, and Armstrong acquired this  
13 from Gulf on May the 1st, 1987, and Sirgo acquired it  
14 from Armstrong July the 1st, 1989.

15 During its initial phase, it recovered  
16 2,551,000 barrels of primary oil, we think, and during  
17 its first flood, waterflood secondary phase, it  
18 recovered 4,445,000 barrels of oil.

19 It is the intent of Pyramid to redevelop  
20 these fields, and we feel that in each unit over  
21 2 million barrels of additional oil will be recovered,  
22 and the total recovery will exceed over 4 million  
23 barrels of oil.

24 I might also mention here that during this  
25 redevelopment phase we will be closely watching the

1 records and the data and keeping abreast of enhanced  
2 oil recovery. We feel that this is a good candidate  
3 for tertiary oil recovery at some not-too-distant  
4 future date.

5 Q. As part of this project, are certain lease  
6 line or protection wells going to need to be drilled  
7 between the two existing units?

8 A. Yes.

9 Q. Could you identify what has been marked as  
10 Sirgo Exhibit Number 2, please?

11 A. Yes, it is a listing of wells that shows  
12 those wells that are going to be drilled very close to  
13 the lease lines between the East Pearl Queen Unit and  
14 the West Pearl Queen Unit. That's a list of eight  
15 wells.

16 MR. CARR: Mr. Stogner, this is the exhibit  
17 that has the error in it. If we go to the second well,  
18 the Number 180, those numbers are not consistent with  
19 what we had in our Application or what we are seeking  
20 here today. What is in the Application and what is in  
21 the ad is correct, and instead of being 2563 feet from  
22 the south line, it should be, as advertised, 2630 feet.

23 We also have a problem with the 192 well,  
24 which is the fourth well down, and again, the numbers  
25 are wrong. It should be 1330 feet from the south

1 line -- That's what was advertised -- and 1330 feet  
2 from the east line. That again is what was advertised.

3 EXAMINER STOGNER: Thank you, Mr. Carr.

4 MR. CARR: And then if we get down to the  
5 Number 84 well, again that is the well that is the  
6 subject of my initial Request for Amendment, and the  
7 first number there should be 165, not 265.

8 Having rewritten the entire exhibit, we are  
9 prepared to go forward with it.

10 MR. STAMETS: Excuse me. 265 is the correct  
11 number, Bill.

12 MR. CARR: I'm sorry, I'm sorry. On the 84  
13 Well, 265 is correct, that's right, and that is what we  
14 said earlier. I'm sorry.

15 Q. (By Mr. Carr) Mr. Frick, would you identify  
16 Exhibit Number 2, please?

17 A. It's a -- Again, it's a listing of the eight  
18 wells that will be drilled real close to the lease  
19 lines between the East Pearl and the West Pearl Queen  
20 Units.

21 Q. And this includes all the wells, not just  
22 those that are identified in today's hearing?

23 A. That's correct.

24 Q. All right.

25 A. It's a listing of eight wells.

1 Q. Before we go into the percentages and the  
2 drainage numbers in the center, I think it might be  
3 helpful to go forward with the testimony and come back  
4 to this.

5 A. All right.

6 Q. So if you could at this time, could you go  
7 through Exhibit Number 3 and identify that for Mr.  
8 Stogner?

9 A. Exhibit Number 3 is a blowup of -- an  
10 enlargement, I should say, of Exhibit Number 1, showing  
11 the three wells that's on the lease lines, close to the  
12 lease lines, and that are the subject of today's  
13 hearing.

14 Q. And under the rules, these would need to be  
15 back 330 feet from the lease line?

16 A. That's my understanding.

17 Q. All right. Could you at this point in time  
18 simply explain why you need to go in and drill these  
19 three additional wells?

20 A. Yes. We are going to use a five-spot pattern  
21 in our waterflood, and with this five-spot pattern we  
22 need to have a producing well in the center of these  
23 five spots in order to capture the oil that's lying in  
24 this area. If we don't drill these wells, a  
25 considerable volume of oil will not be recovered. In

1 fact, I estimate that each of these oil wells will  
2 recover in excess of 50,000 barrels of oil.

3 Q. Are you planning to utilize the data obtained  
4 from these wells to confirm your current engineering  
5 analysis upon which you're basing your overall plans  
6 for this project?

7 A. That's correct. We have the plan now that  
8 we're going to drill five or six wells, and we're going  
9 to extensively log them, and we're going to core three  
10 of them, we're going to test them, the productivity of  
11 each of these wells under current conditions, and use  
12 this data to upgrade the previous evaluation that we've  
13 made, that this would be an economically viable thing  
14 to do, to waterflood these two units and to recover  
15 additional oil.

16 Q. And located as these are on the boundary  
17 between the units, will the information, in your  
18 opinion, be of value in confirming your analysis for  
19 both of the -- what are now separate units?

20 A. That's correct. I have made a careful study  
21 of the logs on core analysis, and it so happens that  
22 the porosity of both the East Pearl and West Pearl  
23 Units are almost identical.

24 Also, their water saturations are almost  
25 identical. The recovery on a per acre foot in the



1 previous floods is very close to the same, and I feel  
2 that the benefit obtained from these wells will be  
3 applicable to both units.

4 Q. Let's go now to what has been marked as Sirgo  
5 Exhibit Number 4, and I would ask you to identify that  
6 and review this for the Examiner.

7 A. This is a structure map of the -- based on  
8 the top of the Queen Formation, on -- that covers the  
9 East and West Pearl Queen Units.

10 Q. And I believe you've indicated from your  
11 analysis that this is a fairly uniform reservoir?

12 A. Well, it's really a quite heterogeneous  
13 reservoir, but it's fairly uniform in its coverage of  
14 the entire area in question.

15 Q. Is the structure critical in terms of  
16 implementing an effective waterflood in this area?

17 A. Not to my knowledge. It has -- The pay zones  
18 are very similar regardless of whether they were --  
19 regardless of their structure, position.

20 Q. Let's go now to Exhibit Number 5, and I'd ask  
21 you to identify that, please.

22 A. Exhibit Number 5 is a type log of the area in  
23 question. It shows the top of the Queen Formation on  
24 this log and also the top of the Penrose. In the  
25 center column of this log, there's a 1 up near the top,

1 a 2 further down, a 3 and a 4 in the center of this  
2 log, identifying that there are four different pay  
3 zones in this area that we are going to attempt to  
4 redevelop and re-waterflood.

5 Each of these zones -- On average, they're  
6 encountered between about 4750 and 4900 feet in depth.

7 The top zone, zone number 1, is very thin.  
8 And in fact, it was overlooked by some of the first  
9 early wells. It averages only about three foot thick,  
10 in my opinion.

11 And in zone number 2 there's on average,  
12 throughout the whole area, about seven feet of oil pay  
13 zone.

14 In zone 3 the average is about 14 feet, pay  
15 zone, and zone 4, about 11 feet, for a total of 35 feet  
16 of oil pay sand in each well.

17 Q. And you intend to implement waterflooding in  
18 each of the four zones?

19 A. That's correct. The zone number 1 may -- may  
20 not be flooded in its entirety because of its thinness,  
21 but it's the intent to flood them if it at all can be  
22 commercially accomplished.

23 Q. Let's go back to Exhibit Number 2 now, and  
24 I'd ask you to review the conclusions you've reached  
25 concerning drainage and counter-drainage along the

1 boundary between these two units.

2 A. Yes, when I first looked at these units I  
3 realized that they had separate land -- royalty owners  
4 and that we needed to protect the correlative rights of  
5 all of the owners, as well as those of the working-  
6 interest owners.

7 So we -- I went through the boundary line and  
8 noticed that there was exactly the eight wells to be  
9 drilled in the boundary, and I located, or had Sirgo  
10 actually -- I worked with Sirgo and had them locate  
11 four of those wells on the East Pearl Queen Unit and  
12 four of them on the West Pearl Queen Unit so that the  
13 drainage patterns would become compensatory.

14 They -- Each of these wells in their flood  
15 pattern will drain about 40 acres of each of the  
16 producers, on average, and in the center of Exhibit 2  
17 I've listed a heading called Capture Percentage, and  
18 then under that I have West Pearl Queen Unit and East  
19 Pearl Queen Unit.

20 And from the location of the wells, like on  
21 179, it can -- Normal drainage patterns, Well 179, 50  
22 percent of the oil would be drained from the East Pearl  
23 Queen Unit and 50 percent from the West Pearl Queen  
24 Unit.

25 And I went down all eight of these locations

1 and made the same observation, like on number 180. If  
2 you'll look at the map on Well Number 180, three-  
3 fourths of that 40 acres around 180 lies in the West  
4 Pearl Queen Unit, which is 75 percent of that 40. And  
5 then 25 percent of it is from the East Pearl Queen  
6 Unit.

7 And going through all eight of these wells, I  
8 totaled them up and it comes out that each one of the  
9 wells will get 400 percent recovery from this area, and  
10 on a per-well basis it would balance exactly. In other  
11 words -- or a drainage-area basis, the East Pearl Queen  
12 Unit would get half of the oil, and the West Pearl  
13 Queen Unit would be half of the oil.

14 I feel that right through this area that on  
15 average the pay sand thicknesses on each unit are  
16 approximately the same, and it would be -- their  
17 correlative rights would be protected by locating the  
18 wells in these positions.

19 Q. In your opinion, as a result of this proposed  
20 redevelopment program, when it is fully implemented,  
21 will drainage from each unit be compensated for by  
22 drainage from the other unit involved?

23 A. That's correct.

24 Q. In your opinion, will granting this  
25 Application be in the best interest of conservation,

1 the prevention of waste and the protection of  
2 correlative rights?

3 A. I do.

4 Q. Was the BLM and State Land Office advised of  
5 this proposal?

6 A. I think this is the advice that we're giving  
7 them today, that this is my only knowledge that they  
8 have been properly advised.

9 Q. And, Mr. Frick, were Exhibits 1 through 5  
10 either prepared by you or compiled under your  
11 direction?

12 A. They were either prepared by me or they  
13 were -- I studied them in enough detail that I feel  
14 confident that they are representative of the facts.

15 Q. So you can confirm their accuracy based on  
16 your review?

17 A. That's correct.

18 MR. CARR: At this time, Mr. Stogner, I would  
19 move the admission of Sirgo Exhibits 1 through 5.

20 EXAMINER STOGNER: Exhibits 1 through 5 will  
21 be admitted into evidence.

22 MR. CARR: And that concludes my direct  
23 examination of Mr. Frick.

24 EXAMINER STOGNER: Mr. Carr, before we go any  
25 further --

1 MR. CARR: Yes, sir.

2 EXAMINER STOGNER: -- a question on  
3 notification. I see that there was no mailed  
4 notification because --

5 MR. CARR: There was no mailed notification,  
6 Mr. Frick.

7 Q. (By Mr. Carr) Who operates all acreage  
8 offsetting each of these proposed unorthodox locations?

9 A. At this time Sirgo's operating on behalf of  
10 Pyramid Energy Corporation.

11 Q. And there are no other operators involved  
12 that would offset either directly or diagonally any of  
13 these three wells?

14 A. To my knowledge, there is none.

15 MR. CARR: That's all I have.

16 EXAMINATION

17 BY EXAMINER STOGNER:

18 Q. Mr. Frick, earlier in your testimony -- I'm  
19 going to refer back to Exhibit 1 -- you mentioned the  
20 percentage that was owned by Pyramid was 92 percent in  
21 the West Pearl Queen and 95 in the East Pearl Queen; is  
22 that correct?

23 A. That's correct, my understanding. I have not  
24 examined title; I just got this from our lawyer.

25 There are some outstanding interests in these

1 units that have not sold, but we are going to be the  
2 operator, with Sirgo being operator at this moment in  
3 time, and we're stepping up to the be operator ourself.

4 Q. So you don't have a list of that five or  
5 eight percent who have not -- that are still  
6 outstanding?

7 A. No, I do not.

8 Q. Have they bought this unit from Petrus, the  
9 East Pearl Queen Unit was bought from Petrus?

10 A. It's my understanding it was, yes, and that  
11 they sold to Sirgo last November.

12 Q. And how about the West Pearl Queen Unit? Who  
13 did it belong to?

14 A. It belonged to Armstrong.

15 Q. Armstrong. Now, did they have outstanding  
16 owners at the same percentage, whenever Petrus and  
17 Armstrong operated each unit?

18 A. I understand they did.

19 EXAMINER STOGNER: Are there any other  
20 questions of Mr. Frick?

21 MR. CARR: I have no further questions.

22 EXAMINER STOGNER: Does anybody else have  
23 anything further?

24 MS. HOWARTH: I have a question. What  
25 percentage of state land is held in each of these units

1 along this boundary line?

2 EXAMINER STOGNER: Excuse me?

3 MS. HOWARTH: Do you know what percentage of  
4 this is state lands along the boundary line?

5 THE WITNESS: No, I don't, not along the  
6 boundary line. I do know that the State of New Mexico  
7 has royalty interest under about 44 percent of the East  
8 Pearl Queen Unit and about 92 percent of the West Pearl  
9 Queen Unit, and that's -- But actually, right at the  
10 boundary line, I'm not sure.

11 But the fact that the units have been formed,  
12 that is about -- That's going to be their proportion of  
13 royalty off of the units. The units are going to stay  
14 in existence as originally formed, and these are just  
15 -- This is just a redevelopment or a second  
16 waterflooding, if you want to say that, of the units.

17 EXAMINER STOGNER: Are there any other  
18 questions?

19 For the record, would you please state your  
20 name?

21 MS. HOWARTH: My name is Susan Howarth,  
22 H-o-w-a-r-t-h. I'm with the State Land Office,  
23 petroleum engineer.

24 EXAMINER STOGNER: Okay, thank you.

25 Is there anything further in Cases Numbers



1 9920 or 9921?

2 If not, both cases will be taken under  
3 advisement. And with that, hearing adjourned.

4 (Thereupon, these proceedings were concluded  
5 at 3:14 p.m.)  
6  
7  
8  
9  
10  
11  
12  
13

14 I do hereby certify that the foregoing is  
15 a complete record of the proceedings in  
16 the Examiner hearing of Case Nos. 9920 and 9921  
17 heard by me on 18 April 19 90.

18 Michael E. Slayman, Examiner  
19 Oil Conservation Division  
20  
21  
22  
23  
24  
25

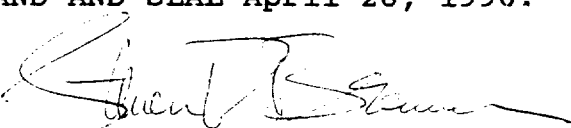
## 1 CERTIFICATE OF REPORTER

2  
3 STATE OF NEW MEXICO )  
4 COUNTY OF SANTA FE ) ss.

5  
6 I, Steven T. Brenner, Certified Shorthand  
7 Reporter and Notary Public, HEREBY CERTIFY that the  
8 foregoing transcript of proceedings before the Oil  
9 Conservation Division was reported by me; that I  
10 transcribed my notes; and that the foregoing is a true  
11 and accurate record of the proceedings.

12 I FURTHER CERTIFY that I am not a relative or  
13 employee of any of the parties or attorneys involved in  
14 this matter and that I have no personal interest in the  
15 final disposition of this matter.

16 WITNESS MY HAND AND SEAL April 28, 1990.

17   
18 STEVEN T. BRENNER  
19 CSR No. 106

20 My commission expires: October 14, 1990  
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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

CASE NO. 9921  
ORDER NO. R-9165-A

APPLICATION OF SIRGO OPERATING, INC.  
FOR AN UNORTHODOX OIL WELL LOCATION,  
LEA COUNTY NEW MEXICO

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R-9165 dated April 27, 1990, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) Finding Paragraph No. 9 on page 2 of said Order No. R-9165 be and the same is hereby amended to read as follows:

"(9) The applicant proposes to ultimately drill a total of eight producing wells along the boundary of both Units and the locations of all eight wells, as proposed by the applicant, will be such that compensatory drainage between both Units will result."

(2) Decretory Paragraph No. 2 on page 3 of said Order No. R-9165 be and the same is hereby amended to read as follows:

"(3) To assure that compensatory drainage is occurring between both the East and West Pearl Queen Units this case may be reopened in May, 1991 if all eight proposed Unit boundary producing wells have not been completed or are not being drilled."

(3) The corrections set forth in this order be entered nunc pro tunc as of April 27, 1990.

DONE at Santa Fe, New Mexico, on this 4th day of May, 1990.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*William J. Lemay by David R. Catanzaro*

WILLIAM J. LEMAY  
Director

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 9921  
ORDER NO. R-9165

APPLICATION OF SIRGO OPERATING, INC.  
FOR TWO UNORTHODOX OIL WELL LOCATIONS,  
LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 18, 1990, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 27th day of April, 1990, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) At the time of the hearing, this case was consolidated with Division Case No. 9920 for the purpose of testimony.

(3) The applicant, Sirgo Operating, Inc., seeks approval of two unorthodox oil well locations for the purpose of completing an efficient injection/production pattern within the West Pearl-Queen Unit Waterflood Project:

- a) the West Pearl-Queen Unit Well No. 180 to be drilled 2630 feet from the South and West lines (Unit K); and

Case No. 9921  
Order No. R-9165  
Page No. 2

- b) the West Pearl-Queen Unit Well No. 192 to be drilled 1330 feet from the South and East lines (Unit J).

Both in Section 28, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.

(4) The West Pearl-Queen Unit Well No. 180 is to be dedicated to an existing 40-acre oil spacing and proration unit comprising the NE/4 SW/4 of said Section 28, which is presently dedicated to the West Pearl-Queen Unit Well No. 121 located at a standard oil well location pursuant to General Rule 104.F.I., 1980 feet from the South and West lines (Unit K) of said Section 28.

(5) The West Pearl-Queen Unit Well No. 192 is to be dedicated to the NW/4 SE/4 of said Section 28, which has located thereon the West Pearl-Queen Unit Well No. 122 located 1980 feet from the South and East lines (Unit J) of said Section 28, which is presently being utilized as a water injection well for said project.

(6) Both 40-acre tracts are within the West Pearl-Queen Unit Waterflood Project Area, now owned by Pyramid Energy, Inc. and operated by the applicant, and are therefore governed by the special operating provisions for said project, as promulgated by Division Order No. R-2729, as amended, which provides for additional wells at unorthodox infill locations as may be necessary to complete an efficient injection/production pattern, provided however that said wells are drilled no closer than 990 feet to the outer boundary of the West Pearl-Queen Unit.

(7) In said Section 28 the West Pearl-Queen Unit includes the W/2, W/2 SE/4, and SE/4 SE/4; also included in the remainder of said Section 28 is the East Pearl-Queen Unit, which is owned by Pyramid Energy, Inc. and operated by the applicant, but with different interest ownership, and also being waterflooded in the same manner as the West Pearl-Queen Unit Waterflood Project.

(8) Both of the subject wells will serve to complete a more efficient injection/production pattern between the two projects.

(9) Since both wells are located on the boundary between both waterflood projects and the location of both are at places where said boundary line forms a right angle, the applicant proposes to allocate production equitable between both units whereby 75% of each well's production will be allocated to the West Pearl-Queen Unit and 25% to the East Pearl-Queen Unit.

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Order No. R-9165  
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(10) No interested party appeared and/or objected to the proposed unorthodox locations.

(11) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil in the affected pool, is in the best interests of conservation and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Sirgo Operating, Inc. for two unorthodox infill oil well locations in Section 28, Township 19 South, Range 35 East, West Pearl-Queen Unit Waterflood Project Area, Pearl-Queen Pool, Lea County, New Mexico, is hereby approved as follows:

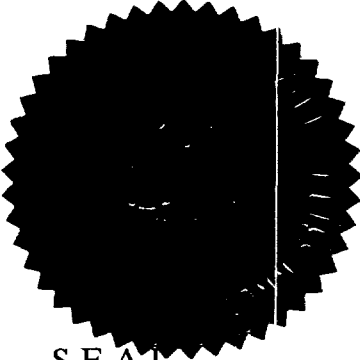
- a) the West Pearl-Queen Unit Well No. 180 to be drilled 2630 feet from the South and West lines (Unit K), said well to be dedicated to an existing 40-acre oil spacing and proration unit comprising the NE/4 SW/4 of said Section 28, which is presently dedicated to the applicant's West Pearl-Queen Unit Well No. 121 located 1980 feet from the South and West lines; and
- b) the West Pearl-Queen Unit Well No. 192 to be drilled 1330 feet from the South and East lines (Unit J) to be dedicated to the NW/4 SE/4 of said Section 28 forming a standard 40-acre oil spacing and proration unit for said pool.

(2) Seventy-five percent of the hydrocarbon production from both of the subject wells shall be allocated to the West Pearl-Queen Unit and twenty-five percent to the East Pearl-Queen Unit.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.


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Order No. R-9165  
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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director